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TO:	MS APPEAL BRIEF- PATENTS ATTN: Ex. Vy Q. Bui	FROM:	Joseph C. Huebsch
FAX:	(571) 273-8300	DATE:	October 30, 2008

You should receive 37 pages including cover sheet

Applicant:	Jan Weber	Confirmation No.	6210
Serial No.:	10/084,857	Examiner:	Vy Q. Bui
Filed:	February 25, 2002	Art Unit:	3734
		Docket:	**01-264US** [202.0050001]

Title: NON-INVASIVE HEATING OF IMPLANTED VASCULAR TREATMENT DEVICE

MS APPEAL BRIEF- PATENTS
Commissioner for Patents
P.O. BOX 1450
Alexandria, VA 22313-1450

We are transmitting herewith the following attached items and information (as indicated with an "X"):

X APPELLANT'S REPLY BRIEF TO THE SUPPLEMENTAL EXAMINER'S ANSWER OF OCTOBER 20, 2008, AS APPLIED TO THE "CORRECTED" EXAMINER'S ANSWER OF OCTOBER 3, 2008

PLEASE ASSOCIATE THIS APPLICATION WITH CUSTOMER NUMBER 54953

CERTIFICATE UNDER 37 C.F.R. §1.8: The undersigned hereby certifies that this correspondence is being transmitted to the United States Patent Office facsimile number (571) 273-8300 on October 30, 2008

Jillian K. Buse
Name

Signature

Respectfully Submitted,

By: _____
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Jan Weber

Application No.: 10/084,857 Confirmation No: 6210

Filed: February 25, 2002 Art Unit: 3734

For: Non-Invasive Heating of Implanted Vascular Treatment Device Examiner: Vy Q. Bui

APPELLANT'S REPLY BRIEF TO THE SUPPLEMENTAL EXAMINER'S ANSWER OF OCTOBER 20, 2008, AS APPLIED TO THE "CORRECTED" EXAMINER'S ANSWER OF OCTOBER 3, 2008

MS Appeal Brief – Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

This Reply Brief, in compliance with 37 C.F.R. § 41.41, is in response to the Supplemental Examiner's Answer dated October 20, 2008, as applied to the "Corrected" Examiner's Answer dated October 3, 2008, and in furtherance of the

Reply Brief filed July 6, 2006, Appellants' Brief filed March 22, 2006, and Notice of Appeal filed under 37 C.F.R. § 41.31 on February 22, 2006.

The Examiner's Grounds for Rejection in the Supplemental Examiner's Answer dated October 20, 2008, as applied to the "Corrected" Examiner's Answer dated October 3, 2008, are substantially the same as those presented in the Final Office Action dated November 23, 2005, the Examiner's Answer dated June 15, 2006, and the Supplemental Examiner's Answer dated October 17, 2006. Appellant has addressed these rejections in an Appeal Brief dated March 22, 2006, a Reply Brief dated July 6, 2006, and a Reply Brief dated November 17, 2006.

In the Supplemental Examiner's Answer dated October 20, 2008, and the associated Corrected Examiner's Answer dated October 3, 2008, the Examiner provides responses to the arguments presented in the Appellant's Appeal Brief and Reply Briefs. Appellant notes that no Reply Brief was submitted by Appellant between the Supplemental Examiner's Answer dated October 20, 2008, and the associated Corrected Examiner's Answer dated October 3, 2008.

Appellant respectfully traverses the assertions and conclusions provided in the Supplemental Examiner's Answer and the associated Corrected Examiner's Answer. The following is the Appellant's Reply Brief to both the Supplemental Examiner's Answer and the associated Corrected Examiner's Answer.

This Reply Brief contains items under the following headings as required by 37 C.F.R. § 41.37:

I. Real Party in Interest
II. Related Appeals and Interferences
III. Status of Claims
IV. Status of Amendments
V. Summary of Claimed Subject Matter
VI. Grounds of Rejection to be Reviewed on Appeal
VII. Argument – Reply to the Supplemental Examiner's Answer as applied to the Corrected Examiner's Answer
VIII. Claims Appendix
IX. Evidence Appendix
X. Related Proceedings Appendix

The final page of this brief bears the attorney's signature.

I. REAL PARTY IN INTEREST

The real party in interest for this appeal is SciMed Life Systems, Inc. a corporation established under the laws of the State of Minnesota and having a principle place of business at One Scimed Place, Maple Grove, Minnesota 55311.

II. RELATED APPEALS AND INTERFERANCES

Appellant is unaware of any related appeal or interference.

III. STATUS OF CLAIMS

The Claims 1-2, 4-33, and 42-49 are pending. Claims 3 and 34-41 are cancelled. Claims 9, 10, 13-19, 27, and 30-33 are withdrawn. No claims are allowed. Claims 1, 2, 4-8, 11, 12, 20-26, 28, 29, and 42-49 stand rejected and are the subject of this appeal and the following response to the Supplemental Examiner's Answer dated October 20, 2008, as applied to the Corrected Examiner's Answer dated October 3, 2006.

IV. STATUS OF AMENDMENTS

Appellant filed a Response after Final Rejection on January 4, 2006, (hereinafter "Final Response") with no claims amended, added, or cancelled. The Examiner responded to the Final Response with an Advisory Action mailed January 31, 2006. Appellant filed an Appeal Brief on March 22, 2006, with no claims amended, added, or cancelled. The present Reply Brief is being submitted in response to the Supplemental Examiner's Answer dated October 20, 2008, as applied to the Corrected Examiner's Answer dated October 3, 2006. This Reply Brief is submitted with no claims amended, added, or cancelled.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Independent claim 1 recites a vascular treatment device. The device includes a stent formed with a magnetically susceptible material having a magnetic susceptibility that decreases within a preselected temperature range (page 5, lines 15-17; page 6, lines 5-16; Figure 1, element 12).

Dependent claim 2 to independent claim 1 recites that the susceptible material has a Curie temperature in the preselected temperature range (page 6, lines 5-16).

Dependent claim 4 to independent claim 1 recites that the stent includes a core, such that the susceptible material includes a coating on a surface of the core (page 8, lines 1-5 and lines 16-17).

Dependent claim 5 to dependent claim 4 recites that the coating is disposed on an external surface of the core (page 8, lines 5-7; Figure 2, element 12).

Dependent claim 6 to dependent claim 4 recites that the coating is disposed on an internal surface of the core (page 8, lines 7-9; Figure 3, element 12).

Dependent claim 7 to dependent claim 4 recites that the coating is disposed on both an internal and external surface of the core (page 8, lines 10-13; Figure 4, element 12).

Dependent claim 8 to independent claim 1 recites that the stent includes a core, such that the core is formed of the susceptible material (page 8, lines 22-24).

Dependent claim 11 to dependent claim 4 recites that the core comprises a magnetically susceptible material (page 9, lines 9-12).

Dependent claim 12 to independent claim 1 recites that the susceptible material comprises one of Ferrite Oxide (FEO) (page 6, lines 16-17) and Chromium Oxide (CrO) (page 6, lines 21-25).

In an additional embodiment, independent claim 20 recites a vascular treatment system that includes an electromagnetic field generator (page 5, lines 17-19; Figure 1, element 18). The system also includes a medical device (page 5, lines 14-16) deliverable to a treatment site (page 5, lines 14-17). The medical device includes a magnetically susceptible material being magnetically susceptible to an

electromagnetic field generated by the generator and having a Curie temperature in a preselected range (page 5, lines 24-30; page 6, lines 1-20), such that the implantable device heats to a temperature sufficient to treat the treatment site when the electromagnetic field is applied (page 7, lines 21-25).

Dependent claim 21 to independent claim 20 recites that the medical device comprises a stent having a core material (page 8, lines 16-18).

Dependent claim 22 to dependent claim 21 recites that the susceptible material comprises a coating on a surface of the core material (page 8, lines 1-5).

Dependent claim 23 to dependent claim 22 recites that the coating is disposed on an external surface of the core material (page 8, lines 5-7; Figure 2, element 12).

Dependent claim 24 to dependent claim 22 recites that the coating is disposed on an internal surface of the core material (page 8, lines 7-9; Figure 3, element 12).

Dependent claim 25 to dependent claim 22 recites that the coating is disposed on both an internal and external surface of the core material (page 8, lines 10-13; Figure 4, element 12).

Dependent claim 26 to dependent claim 21 recites that the core material is formed of the susceptible material (page 8, lines 10-13; Figure 4, element 12).

Dependent claim 28 to dependent claim 22 recites that only preselected portions, less than the entire core, are coated with the susceptible material (page 11, lines 25-28).

Dependent claim 29 to dependent claim 22 recites that the core material comprises a magnetically susceptible material (page 9, lines 9-12).

Dependent claim 42 to independent claim 1 recites that the coating includes a polymer binder for the magnetically susceptible material (page 9, lines 9-12).

Dependent claim 43 to independent claim 1 recites that the core is a metal selected from the group stainless steel, Nitinol, and tantalum (page 8, lines 17-19; page 14, lines 7-8).

Dependent claim 44 to independent claim 1 recites that the coating includes a sintered coating of the magnetically susceptible material on the core (page 8, lines 1-5 and lines 16-17).

Dependent claim 45 to independent claim 1 recites that the coating includes a painted coating of the magnetically susceptible material on the core (page 8, lines 1-5 and lines 16-17).

Dependent claim 46 to independent claim 20 recites that the coating includes a polymer binder for the magnetically susceptible material (page 8, lines 13-16).

Dependent claim 47 to independent claim 20 recites that the core is a metal selected from the group stainless steel, Nitinol, and tantalum (page 8, lines 17-19; page 14, lines 7-8)

Dependent claim 48 to independent claim 20 recites that the coating includes a sintered coating of the magnetically susceptible material on the core (page 8, lines 1-5 and lines 16-17).

Dependent claim 49 to independent claim 20 recites that the coating includes a painted coating of the magnetically susceptible material on the core (page 8, lines 1-5 and lines 16-17).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The first issue is whether claims 1-2, 4-7, 20-25, 43, and 47 are unpatentable under 35 U.S.C. § 102(e) as anticipated by U.S. Patent No. 6,364,823 to Garibaldi et al. (hereinafter "Garibaldi").

The second issue is whether claims 8, 11-12, 26, 29, 42, 44-46, and 48-49 are unpatentable under 35 U.S.C. § 103(a) as obvious over Garibaldi.

The third issue is whether claim 28 is unpatentable under 35 U.S.C. § 103(a) as being obvious over Garibaldi in light of U.S. Patent No. 6,786,904 to Döscher et al. (hereinafter Döscher).

VII. ARGUMENT

RESPONSE TO DETAILED ACTION

In the Corrected Examiner's Answer dated October 3, 2006, it was asserted that "Applicant's arguments raised the first time in the Appeal Brief (3/24/2006)" substantiate relying upon the Döscher reference for § 103(a) rejections of "claims 12, 28" (although the Döscher reference was only applied to claim 28). Appellant respectfully submits that no new arguments were raised in Appellant's Appeal Brief dated March 24, 2006. Rather, Appellant addressed the arguments raised by the Examiner in the Final Office Action dated November 23, 2005.

Appellant now presents a Reply Brief under 37 C.F.R. §41.41 in response to the Supplemental Examiner's Answer dated October 20, 2008, as applied to the Corrected Examiner's Answer dated October 3, 2006. Appellant notes that the arguments presented by the Examiner are substantially the same as those made in the vacated Examiner's Answer dated June 15, 2006, and the vacated Supplemental Examiner's Answer dated October 17, 2006.

REJECTIONS UNDER 35 U.S.C. § 102(e)

Claims 1-2, 4-7, 20-25, 43, and 47 were rejected under 35 U.S.C. § 102(e) as being allegedly anticipated by Garibaldi. Appellant respectfully traverses the rejection of the claims, and addresses such rejection as follows.

Appellant does not admit that Garibaldi is indeed prior art and reserves the right to swear behind at a future date. Nonetheless, Appellant respectfully submits that the elements and limitations of the claims of the present application, as recited herein, are patentably distinguishable from the teachings of the cited reference for at least the following reasons.

Independent claim 1

In response to Appellant's arguments, the Examiner asserts on page 3 of the Corrected Examiner's Answer dated October 3, 2006, that Garibaldi discloses, "a

medical device 120 (can be used as an embolic coil or a stent) having magnetically susceptible material/padicles [*sic*] disposed around a core of nitinol 122, an [*sic*] magnetic field B." The Examiner goes on to assert:

> The magnetically susceptible material (particles) has a Curie point below normal body temperature of 98.6 F (col. 13, lines 9-33) so that when deployed in a patient, the patient body will cause the magnetically susceptible material (particles) to decrease the magnetic susceptibility.

Appellant respectfully traverses.

The Corrected Examiner's Answer also asserts in the Response to Argument section on pages 5-6 that Garibaldi explicitly discloses:

> patches 120 have a magnetic susceptibility that decreases within a preselected temperature range and a magnetic material whose Curie point below normal body temperature can be used to make patches 120 to form a stent. Garibaldi-'823 (abstract; col. 13, lines 10-33) suggests that one can use a magnetic material (such as Gadolinium having a Curie temperature of 15 Celsius degrees, or PdNi having Curie temperature of 32 Cesius degrees) with a Curie temperature below body temperature to form an embolic material or a stent. Notice that body temperature of 98.6F or 36 Celsius is greater than the Curie temperature of the magnetic material and therefore the body temperature would decrease magnetic property of the stent formed with patches 120 made of magnetic material according to the teachings of Girabaldi-'823.

Appellant respectfully traverses these assertions as applied to independent claim 1.

As discussed in Appellant's Appeal Brief and Reply Brief of July 6, 2006, to Examiner's original Answer of June 15, 2006, Garibaldi provides for using multiple magnetic patches for forming continuous interior wall reinforcement, like a stent (col. 8, lines 53-61). To accomplish this, the "patch 120 includes magnetic material, for example, particles of a magnetically responsive material or magnetic wire mesh." (Col. 8, lines 10-11). Garibaldi indicates that food grade iron particles of about 0.5 microns to about 50 microns are a suitable magnetic material for the patch 120 (col. 8, lines 14-15). Garibaldi also indicates that a magnetic field is applied so as to move the patch 120 (col. 8, lines 26-32).

First, the Curie temperature for iron is about 770 °C. As such, one of ordinary skill in the art would not use iron particles as the "magnetic material"

provided by Garibaldi. For one reason, to decrease the magnetic susceptibility of the iron particles would require heating the patch (or a stent) to above the Curie temperature of 770 °C, which would be destructive to biological tissue within an unpredictable vicinity while being used for its intended purpose. As such, use of iron would not be suitable for a stent formed with a magnetically susceptible material having a magnetic susceptibility that decreases within a preselected temperature range, as recited in Appellant's independent claim 1.

Second, while Garibaldi does identify magnetically controllable materials with Curie temperatures below a normal body temperature, as the Examiner indicated in the Response to Arguments quoted above, the magnetically controllable materials are provided in a separate and distinct section of Garibaldi entitled "Embolic Compositions" that discusses a separate and unrelated embodiment of the disclosure (starting at col. 11, line 17). For example, Garibaldi states, "flowable embolic agents offer advantages over objects including the ability to uniformly fill the defect, and the relative ease of delivering a flowable embolic agent versus multiple discrete objects, such as coils." (Col. 2, lines 59-63). Garibaldi goes on to state in column 3, lines 42-48:

> In accordance with one aspect of this invention, a liquid embolic agent is provided with a magnetic constituent, which allows the magnetic embolic agent to be controlled by a magnetic field applied by an external source magnet. The applied magnetic field creates a force that draws the magnetic embolic agent into the defect completely filling the defect without voids.

Garibaldi further states, "Generally, the embolic agent of the present invention is a flowable magnetic material that can be delivered through a microcatheter, but which hardens to form a solid embolic." (Col. 11, lines 19-21).

As previously presented in Appellant's Appeal Brief and Reply Brief to the Examiner's original Answer, the Examiner appears to suggest that the magnetic material in the "flowable magnetic material" of the "Embolic Compositions" could be used for the "magnetic material" of the "patch 120". Using the "flowable magnetic material" of the "embolic agent" of Garibaldi in this manner, however, would result in a structure that that did not serve its intended purpose. That is, using

an embolic agent, which is a liquid, flowable magnetic material deliverable through a microcatheter, would not contribute to providing a preformed patch on a continuous interior wall reinforcement, like a stent, to which a magnetic field is applied so as to move the patch, as taught by Garibaldi.

As such, Garibaldi does not teach, "body temperature would decrease magnetic property of the stent formed with patches 120 made of magnetic material", as asserted by the Examiner in the Response to Argument quoted above. Rather, Garibaldi appears to teach that body temperature can decrease the magnetic property of a liquid, flowable embolic agent after the embolic agent is delivered through a microcatheter by an applied magnetic field that draws the magnetic embolic agent into a defect to completely fill the defect without voids in order to harden to form a solid embolic. A "stent", as recited in independent claim 1 of the present application, is not equivalent to an "embolic agent", as taught by Garibaldi, because a stent is defined as, for example, "a surgical implant used to keep an artery open." [The American Heritage® Dictionary of the English Language, Fourth Edition copyright ©2000 by Houghton Mifflin Company. Updated in 2003.] On the other hand, the embolic agent is taught by Garibaldi as being drawn into a defect to completely fill the defect without voids in order to harden to form a solid embolic.

Hence, Garibaldi does not expressly or implicitly teach that the "flowable magnetic material" in the "Embolic Compositions" can be, or should be, used to form the "patch 120." Appellant respectfully submits that, even though Garibaldi may disclose the claimed elements in isolation (much like a dictionary contains all of the words of a given novel), the reference does not expressly show the invention in as complete detail or arranged in such a manner as is contained in independent claim 1.

One apparent reason for why Garibaldi does not teach that the "magnetic material" in the "Embolic Compositions" can be, or should be, used with the "patch 120" is that the "patch 120" would no longer work as intended if the magnetic materials identified by the Examiner were used with the "patch 120." In other words, Garibaldi did not enable the embodiment of the "patch 120" suggested by the Examiner because such an embodiment is not functional.

In the section of Garibaldi entitled "Embolic Compositions," there is described a variety of what are called a "magnetically controllable embolic material" that can undergo a reduction in magnetic properties. As indicated by Garibaldi, this reduction in magnetic properties can occur due to a chemical transition of the magnetic particles (col. 12, lines 17-59), a decay process (col. 12, line 60 – col. 13, line 9), or with a magnetic material having a sufficiently high Curie temperature (col. 13, lines 10-32). In the latter embodiment, the temperature of the patient is reduced below the magnetic material Curie temperature to allow it to remain magnetic. When the body temperature of the patient is restored, Garibaldi indicates that the magnetic material loses its magnetic properties.

Specifically, Garibaldi states in column 13, lines 20-33, (emphasis added):

> Magnetic material whose Curie temperature are below normal body temperature (98.6 F) can be used to make the embolic material magnetic. The surrounding tissue would be sub-cooled to a temperature below this point while the aneurysm is filled and polymerization is occurring so that the material is highly susceptible to the magnetic field. When the procedure is completed the patient would be allowed to warm up to normal body temperature and the filled aneurysm would lose its ferromagnetic properties. Examples of materials with appropriate Curie temperatures are Gadolinium (15 C) and PdNi alloy (32 C). Gadolinium is presently used in MRI contrast agents, and PdNi alloy is used as passively-regulated implants that can be heated using magnetic fields.

Thus, at body temperatures the magnetic material of the "Embolic Compositions" has no ferromagnetic properties. In other words, the magnetic material is no longer magnetic.

Garibaldi appears to teach that the "patches 120" used to form the "stent" are not only moved using a magnetic field, but also that this is done at body temperature (there is no teaching in Garibaldi of "cooling" or "sub-cooling" the blood vessel prior to applying the "patches 120"). However, the "magnetic materials" identified by the Examiner in Garibaldi to be used with the "patches 120" are not magnetic at body temperature. This is why Garibaldi does not, and cannot be used, to teach the embodiment suggested by the Examiner. In other words, Garibaldi does not teach

what is suggested by the Examiner because such a structure will not work for its intended purpose.

If, however, the Examiner's position is that the tissues in the area of the "patches 120" are sub-cooled, the patches 120 will once again not work. For example, as provided by Garibaldi, "[i]n the preferred embodiment, the patch 120 includes a hoop 122 of nitinol . . . that causes the patch 120 to open to its normal . . . shape" (col. 8, lines 2-7). Garibaldi also indicates that "other structure or construction can be provided to cause the patch to assume its extended configuration," but Garibaldi does not teach any other material besides nitinol that can be used to form the "hoop 122". That is, Appellant respectfully submits that structure is defined as something made up of a number of parts that are held or put together in a particular way, and construction is defined as the way in which something is built or put together. [The American Heritage® Dictionary of the English Language, Fourth Edition Copyright © 2000]. Accordingly, it would appear that the "hoop 122" is only made of nitinol.

As appreciated by one of ordinary skill in the art, nitinol is a metal that remembers its geometry. After nitinol is deformed, it regains its original geometry by itself during heating or, at higher ambient temperatures, during unloading. Garibaldi indicates that the tissue surrounding the magnetic material having the sufficiently high Curie temperature needs to be sub-cooled so that the magnetic material can be highly susceptible to a magnetic field. However, sub-cooling the tissue in the area of the "patch 120" with this magnetic material runs counter to allowing the nitinol of "the hoop 122" to obtain its predetermined shape. For example, once the patch 120 having this magnetic material was moved under the influence of the magnetic field, the "patch 120" would then be warmed to allow the nitinol "hoop 122" to expand to its preconfigured shape. Upon warming, however, the nitinol of "the hoop 122" could move the "patch 120" in unpredictable ways relative to its location within the body, negating any potential benefit of having used the magnetic material having the sufficiently high Curie temperature. This provides an additional reasonable explanation as to both why Garibaldi did not arrange the elements as recited in independent claim 1 of the present application and why one

skilled in the art would not now arrange the elements recited in Garibaldi to provide the invention recited in independent claim 1 of the present application.

Similarly, one skilled in the art would not reasonably understand that the "hoop 122" could first be expanded under normal body temperatures followed by a sub-cooling of the surrounding tissue in order to allow the magnetic material to move under the influence of the magnetic field. As will be appreciated, when implanting medical devices in the vasculature, every precaution must be taken to prevent the medical device from being released into and possibly occluding the blood vessel. Once released to allow the "hoop 122" to expand, the magnetic particles of the "patch 120" would not be useful in controlling the device as they would be above their Curie Point (i.e., no longer ferromagnetic).

The Examiner would appear to concur with this point on page 4 of the November 23, 2005, Final Office Action by asserting that "[n]otice that body temperature (98.6F) provides heat that would decrease magnetic property of stent formed with patches 120". As such, even if sub-cooling were to begin once the "hoop 122" was fully deployed, there would still likely be an unacceptable amount of time during which the "patch 120" would be outside the control of any applied magnetic forces.

Moreover, Appellant respectfully notes that Garibaldi does not teach a "stent 120" as asserted by the Examiner. Rather, Garibaldi provides a "patch 120" that can be used to form a continuous interior wall reinforcement, like a stent. In addition, as previously presented, selecting the magnetic material from Garibaldi as suggested by the Examiner would lead to inoperative embodiments of the "patch 120."

Appellant notes that the Examiner stated on page 3 of the Supplemental Examiner's Response dated October 20, 2008, that "claim 1 essentially does not require anything further than a stent formed with a magnetically susceptible material." Appellant traverses such an assertion by noting that the Examiner has inappropriately edited the clause from the end on independent claim 1 that recites, "that decreases within a preselected temperature range."

As previously presented, Appellant respectfully submits that Garibaldi does not teach, "a stent **formed** with a magnetically susceptible material having a

magnetic susceptibility that decreases within a preselected temperature range", as recited in Appellant's independent claims 1. That is, Garibaldi does not teach, "a stent **formed** with a magnetically susceptible material" because the device does not function like a stent until after the patch has been moved by application of a magnetic field. That is, Appellant respectfully submits that a description of an apparatus or device being formed in a particular manner indicates that the apparatus or device has been formed with a particular structure. As previously presented, structure is defined as something made up of a number of parts that are held or put together in a particular way, and construction is defined as the way in which something is built or put together. [The American Heritage® Dictionary of the English Language, Fourth Edition Copyright © 2000]. Accordingly, it would appear that the device taught be Garibaldi is not formed as a stent.

Nor would the embolic agent that is a liquid, flowable magnetic material deliverable through a microcatheter be usable in "a stent formed with a magnetically susceptible material having a magnetic susceptibility that decreases within a preselected temperature range", as recited in Appellant's independent claim 1. As such, Garibaldi is not a suitable reference upon which to base an anticipatory § 102 rejection of independent claim 1.

Appellant also respectfully traverses such an assertion by submitting that Garibaldi does not teach, ""a stent **formed** with a magnetically susceptible material having a magnetic susceptibility that decreases within a preselected temperature range". As previously presented in detail, Garibaldi only teaches magnetically susceptible material having a magnetic susceptibility that decreases within a preselected temperature range in the context of an embolic agent to be drawn into a defect to completely fill the defect without voids in order to harden to form a solid embolic. Consistent with such magnetic material being limited to the embolic agent, the Garibaldi Abstract states, "The [embolic] compositions preferably comprise magnetic particles for controlling delivery of the embolic agent. These magnetic particles preferably lose magnetic strength over time." Hence, among other reasons, Garibaldi does not teach such a material to be used in forming a stent because a stent is defined as, for example, "a surgical implant used to keep an artery

open." [The American Heritage® Dictionary of the English Language, Fourth Edition copyright ©2000 by Houghton Mifflin Company. Updated in 2003.]

The reasons presented above are why Garibaldi does not teach the identical invention in as complete detail as is contained in independent claim 1 of the present application, and why Garibaldi does not teach each and every claim element arranged as in independent claim 1 of the present application. As such, Appellant respectfully submits that Garibaldi does not support a proper § 102 anticipation rejection of independent claim 1, as asserted by the Examiner.

Accordingly, Appellant respectfully requests reconsideration and withdrawal of the § 102 rejection of independent claim 1, as well as claims 2, 4-7, and 43 that depend therefrom.

Independent claim 20

Appellant's independent claim 20 recites, in part:

> a medical device deliverable to a treatment site and including a magnetically susceptible material being magnetically susceptible to an electromagnetic field generated by the generator and having a Curie temperature in a preselected temperature range, such that the implantable device heats to a temperature sufficient to treat the treatment site when the electromagnetic field is applied.

As previously presented with regard to independent claim 1, Appellant respectfully submits that, among other reasons for Garibaldi not being a suitable reference upon which to base a § 102 rejection, the iron particles taught by Garibaldi as the being the "magnetic material" included in the "patch 120" would have a Curie temperature of 770 °C, which would be destructive to biological tissue in an uncontrollably large region adjacent a medical device while being used for its intended purpose. So, use of iron would not be suitable for "a medical device" formed with "a magnetically susceptible material" "having a Curie temperature in a preselected temperature range", as recited in Appellant's independent claim 20.

Additionally, as also previously presented with regard to independent claim 1, while Garibaldi does appear to identify magnetically controllable materials with Curie temperatures below a normal body temperature, such materials are provided

in a separate and distinct section of Garibaldi entitled "Embolic Compositions" that discusses a separate and unrelated embodiment of the disclosure (starting at col. 11, line 17). For example, Garibaldi states, "flowable embolic agents offer advantages over objects including the ability to uniformly fill the defect, and the relative ease of delivering a flowable embolic agent versus multiple discrete objects, such as coils." (Col. 2, lines 59-63). Garibaldi goes on to state in column 3, lines 42-48:

> In accordance with one aspect of this invention, a liquid embolic agent is provided with a magnetic constituent, which allows the magnetic embolic agent to be controlled by a magnetic field applied by an external source magnet. The applied magnetic field creates a force that draws the magnetic embolic agent into the defect completely filling the defect without voids.

Garibaldi further states, "Generally, the embolic agent of the present invention is a flowable magnetic material that can be delivered through a microcatheter, but which hardens to form a solid embolic." (Col. 11, lines 19-21).

So, as previously presented in Appellant's Appeal Brief and Reply Brief to the original Examiner's Answer, the Examiner appears to suggest that the magnetic material in the "flowable magnetic material" of the "Embolic Compositions" could be used for the "magnetic material" of the "patch 120". Using the "flowable magnetic material" of the "embolic agent" of Garibaldi in this manner, however, would result in a structure that that did not serve its intended purpose. That is, using an embolic agent, which is a flowable magnetic material deliverable through a microcatheter, would not contribute to providing a preformed patch on a continuous interior wall reinforcement, like a stent, to which a magnetic field is applied so as to move the patch, as taught by Garibaldi.

Appellant respectfully submits that Garibaldi does not explicitly or implicitly teach that the "flowable magnetic material" in the "Embolic Compositions" can be, or should be, used to form the "patch 120." Appellant respectfully submits that, even though Garibaldi may disclose the claimed elements in isolation (much like a dictionary contains the words of a given novel), the reference does not show the invention in as complete detail or arranged in such a manner as is contained in independent claim 20 of the present application.

That is, Garibaldi appears to describe the magnetic property of an embolic agent after the embolic agent is delivered through a microcatheter by an applied magnetic field that draws the magnetic embolic agent into a defect to completely fill the defect without voids in order to harden to form a solid embolic. Hence, "a medical device" that "heats to a temperature sufficient to treat the treatment site when the electromagnetic field is applied", as recited in independent claim 20 of the present application, is not equivalent to an "embolic agent", as taught by Garibaldi.

Moreover, the present Corrected Examiner's Answer asserts in the Response to Argument section on page 6:

> As admitted in the specification of the present invention (line 15, page 1 to line 2, page 2), a change in the magnetizing force will result in some heat in the stent. Inherently, a change in an electromagnetic field from a zero value to B value applied to Girabaldi-'823's stent 120 will create some level of heat in stent 120. Therefore, Girabaldi-'823 inherently discloses the claimed invention.

Appellant respectfully traverses.

First, the portion of the Background section of Appellant's application cited by the Examiner merely documents underlying principles of electromagnetic physics to aid understanding of the present application by one not having expertise in the field. Appellant respectfully submits that, were educating a reader on the underlying physical principles of an invention to constitute an admission that enables § 102 anticipatory claim rejection, explanations of advanced scientific principles to aid understanding of such by the lay reader would be precluded. Appellant contends that this would undermine one of the principles underlying the public disclosure, written description, and enablement of inventions encouraged by the patent system incorporated into the Constitution of the United States, as opposed to trade secrets.

Secondly, Appellant respectfully traverses the Examiner's assertion that there is, "[i]nherently, a change in an electromagnetic field from a zero value to B value applied to Garibaldi-'823's stent 120 [that] will create some level of heat in stent 120. Therefore, Garibaldi-'823 inherently discloses the claimed invention."

The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. In re Rijckaert, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993). 1981). "To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.' " In re Robertson, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) (citations omitted).

Appellant's independent claim 20 recites that the vascular treatment system includes a medical device that heats to a temperature sufficient to treat a treatment site when an electromagnetic field is applied. Hence, independent claim 20 provides that the heat from the medical device is sufficient to treat the treatment site. In contrast, the Examiner asserts that it would be inherent in Garibaldi that electromagnetic field B passing through "patch 120" generates some level of heat in the device. While some heat may be generated, evidence presented by the Examiner has not made clear how one of ordinary skill in the art would recognize that the "patch 120" should be heated with the electromagnetic field B to a temperature sufficiently high to treat a treatment site. As such, it would appear that, being unwarrantedly expansive, Garibaldi might provide a possibility of heating the "patch 120" to a temperature sufficiently high to treat a treatment site, although Appellant does not admit such, but possibilities are not a sufficient basis for an inherency argument.

Appellant also traverses the assertion, which was made in the Examiner's Supplemental Answer dated October 20, 2008, that "independent claim 20 **does not** specify how much heat is sufficient and how much heat is insufficient. Therefore, it is impossible for one skilled in the art to recognize the difference between the present claimed invention and the Garibaldi-'821 device." In addition to the argument just presented, Appellant also provides an argument as to why this ground is insufficient to reject independent claim 20.

Appellant respectfully submits that independent claim 20 recites, in part, that "the implantable device heats to a temperature sufficient to treat the treatment site when the electromagnetic field is applied." One of ordinary skill in the relevant art would appreciate that temperatures sufficient to treat a treatment site could include those to treat vascular conditions, at least based upon the claim preamble reciting, "A vascular treatment system". In addition, Appellant provides an example of such heating to a temperature sufficient to treat a treatment site for restenosis in the specification as originally filed at page 10, line 27, through page 12, line 18. As such, one of ordinary skill in the relevant art would appreciate the amount of heat that would be sufficient to treat the treatment site based on independent claim 20, and would be able to recognize the differences between the presently claimed invention and the Garibaldi-'821 device.

Accordingly, Appellant respectfully requests reconsideration and withdrawal of the § 102 rejection for independent claim 20, as well as claims 21-25 and 47 that depend therefrom.

REJECTIONS UNDER 35 U.S.C. § 103(a)

Appellant does not admit that Garibaldi is indeed prior art and reserves the right to swear behind at a future date. Nonetheless, Appellant respectfully submits that the elements and limitations of the claims of the present application, as recited herein, are patentably distinguishable from the teachings of the cited reference for at least the following reasons.

Dependent claims 8, 11, 26, and 29

For dependent claims 8, 11, 26, and 29, the Corrected Examiner's Answer acknowledges on page 4 that Garibaldi-'823 does not explicitly disclose the core being made out of a magnetically susceptible material. The Examiner then goes on to assert:

> However, Garibaldi-'823 discloses a metal gadolinium (col. 13, lines 9-33) as a magnetically susceptible material. Gadolinium has a high modulus of elasticity (about 76 Gpa) comparable to a nitinol (about 40-75 Gpa). It would be obvious to one of ordinary

> skill in the ad [*sic*] at the time to [*sic*] the invention **to substitute nitinol core** 122 of the Garibaldi-'823 device by [*sic*] gadolinium core 122 so that the medical device can elastically expand when it is released from a compressed configuration.

Appellant respectfully traverses.

The Examiner appears to assert that "hoop 122 of nitinol" of Garibaldi could be replaced with the element gadolinium. However, Garibaldi discusses the use of the element gadolinium in conjunction with the magnetically controllable flowable embolic material in the section entitled "Embolic Compositions" (col. 11, lines 17-21; col. 13, lines 10-17 and 29-33). As such, gadolinium is taught as "a liquid embolic agent [that] is provided with a magnetic constituent" (col. 3, lines 42-43). As previously presented with regard to the § 102 rejections of independent claims 1 and 20, from which claims 8, 11, 26, and 29 depend, using the "flowable magnetic material" of the "liquid embolic agent" of Garibaldi in this manner, however, would result in a structure that that did not serve its intended purpose.

That is, using a liquid embolic agent, which is a flowable, liquid magnetic material deliverable through a microcatheter, would not contribute to providing a hoop, as taught by Garibaldi, or "a stent formed with a magnetically susceptible material having a magnetic susceptibility that decreases within a preselected temperature range", as recited in Appellant's independent claim 1. Nor would using such a liquid embolic agent contribute to providing a hoop, as taught by Garibaldi, or "a medical device" "such that the implantable device heats to a temperature sufficient to treat the treatment site when the electromagnetic field is applied", as recited in Appellant's independent claim 20.

Appellant respectfully submits that Garibaldi does not explicitly or implicitly teach that the "flowable magnetic material" in the "Embolic Compositions" can be, or should be, used to form the "patch 120" and/or the "hoop 122". For example, consistent with such magnetic material being limited to the embolic agent, the Garibaldi Abstract states, "The [embolic] compositions preferably comprise magnetic particles for controlling delivery of the embolic agent. These magnetic particles preferably lose magnetic strength over time." As such, Appellant respectfully submits that, even though Garibaldi may disclose the claimed

elements in isolation (much like a dictionary contains the words of a given novel), the reference does not expressly show the invention in as complete detail or arranged in such a manner as is contained in independent claims 1 and 20, along with dependent claims 8, 11, 26, and 29.

That is, Garibaldi appears to describe the magnetic property of a liquid embolic agent, such as gadolinium, after the embolic agent is delivered through a microcatheter by an applied magnetic field that draws the magnetic embolic agent into a defect to completely fill the defect without voids in order to harden to form a solid embolic. Hence, Garibaldi does not teach, suggest, or make obvious "a stent" or "a medical device" where "the core [material] is formed of the susceptible material", as recited in Appellant's dependent claims 8 and 26, or where "the core [material] comprises a magnetically susceptible material", as recited in Appellant's dependent claims 11 and 29.

In addition, the element gadolinium is a malleable and ductile metal that does not possess the proper elastic properties to provide the function required by the hoop 122 (i.e., the ability to cause the patch to "open"). In other words, a "hoop 122" made of the element gadolinium, as suggested by the Examiner, once compressed (e.g., bent) or wrapped around a catheter would not have the ability to "open to its normal (preferred round) shape" by itself, as required by Garibaldi.

The reason for this is that gadolinium is neither a superelastic material nor is gadolinium a "shape memory" metal like nitinol. As noted by the Examiner, the Modulus of Elasticity (or Young's Modulus (E)) for gadolinium is approximately 76 GPa. The Modulus of Elasticity for nitinol, however, has different values based on its crystalline phase (e.g., austenite and martensite). As is known to one of ordinary skill in the art, the shape memory effect of nitinol is the process of restoring an original shape of a plastically deformed sample by heating it. This is a result of a crystalline phase change known as "thermoelastic marensitic transformation." Below the transformation temperature, nitinol is martensitic having a Young's Modulus of approximately 28 to 41 GPa. In this state, the nitinol can be deformed from its original shape to be loaded onto, for example, the "catheter 22" of Garibaldi. At the delivery site, the body heat converts the nitinol to its high strength

austenitic condition, with a Young's Modulus of approximately 83 GPa, as it transforms back to its original shape. This ability to undergo this transformation is what makes nitinol desirable in the application proposed in Garibaldi and why gadolinium is not a suitable substitute.

In contrast to nitinol, gadolinium is a polycrystalline structure that does not undergo a thermoelastic transformation like nitinol. That is, once gadolinium is deformed it will not recover its original shape through the application of heat. As illustrated in Garibaldi, the "patch 120" is wound around the "catheter 22" (see Fig. 12B of Garibaldi). Unlike nitinol, gadolinium does not possess the property of having two yield stress states (one for its austenite state and one for its martensite state). Hence, once the gadolinium is deformed by bending around the "catheter 22", a "hoop 122" of gadolinium cannot return to its original shape through the application of body heat. This is most likely why Garibaldi chooses only nitinol for this application, as it can undergo this deformation in its martensite state with the ability to recover its original shape upon transformation to the austenite state. As such, one of ordinary skill in the art would not have chosen to use gadolinium in place of nitinol for "patch 120" and/or "hoop 122" as suggested by the Examiner.

Modifying Garibaldi as suggested by the Examiner would render the "patch 120" and/or "the hoop 122" unsatisfactory for their intended purposes. For this reason, there is no suggestion or motivation to make the proposed modification as asserted by the Examiner. Another reason that there is no suggestion or motivation to make the proposed modification so as to substitute gadolinium for nitinol is that gadolinium is presented under the heading of "Embolic Compositions" and is described, as previously presented, as a liquid embolic agent, which is a flowable magnetic material deliverable through a microcatheter. Hence, Garibaldi teaches one of ordinary skill in the art away from using gadolinium as a substitute for nitinol in a forming a patch, a loop, a stent, and/or a medical device.

In addition, as previously presented for the § 102 rejections, Garibaldi does not support a proper § 102 rejection of independent claims 1 and 20. As claims 8 and 11 are dependent from independent claim 1, and claims 26 and 29 are

dependent from independent claim 20, the § 103 rejection of dependent claims 8, 11, 26, and 29 should be withdrawn.

Based on the forgoing, Appellant respectfully requests reconsideration and withdrawal of the § 103 rejection of dependent claims 8, 11, 26, and 29.

Dependent claim 12

The Examiner maintains the assertion in the Supplemental Examiner's Answer on page 5 and the Corrected Examiner's Answer on pages 4-5 and 7 that, even though Garibaldi does not disclose FeO (ferrite oxide) and/or CrO (chromium oxide) as magnetically susceptible materials, these materials are well known magnetically susceptible materials that could be used in place of a gadolinium or a PdNi, "as would have been obvious to one of ordinary skill in the art". Appellant traverses such assertions.

The Examiner appears to take Official Notice by stating that FeO and CrO are well known magnetically susceptible materials that would have been obvious as substitutes for gadolinium or PdNi in the context of Garibaldi or the present application. Appellant notes that MPEP section 2144.03 states:

> It would not be appropriate for the examiner to take official notice of facts without citing a prior art reference where the facts asserted are not capable of instant and unquestionable demonstration as being well-known. For example, assertions of technical facts in the areas of esoteric technology or specific knowledge of the prior art must always be supported by citation to some reference work recognized as a standard in the pertinent art.

Accordingly, Appellant respectfully requests a "citation to some reference well recognized in the pertinent art" that supports stating that FeO and CrO are well known magnetically susceptible materials that would have been obvious as substitutes for gadolinium or PdNi in the context of Garibaldi or the present application. In the alternative, Appellant requests, as further stated in MPEP section 2144.03:

> If the examiner is relying on personal knowledge to support the finding of what is known in the art, the examiner must provide an affidavit or declaration setting forth specific factual statements and explanation to support the finding.

Appellant makes this request in part based on the fact that gadolinium and PdNi were apparently chosen by Garibaldi based on their Curie temperatures (see col. 13, lines 29-31). Appellant notes that the Curie temperatures of gadolinium and PdNi are not matched by the Curie temperatures of FeO and/or CrO. Hence, one of ordinary skill in the art would not have reasonably believed that FeO and/or CrO could be substituted for gadolinium or PdNi, as is suggested by the Examiner. In other words, there is a specific necessary reason why Garibaldi selects gadolinium and PdNi (i.e., for their Curie temperatures), which would be negated by using FeO and/or CrO.

Appellant respectfully submits that the device taught by Garibaldi does not, and cannot be used, to teach the embodiment suggested by the Examiner because substitution of FeO and/or CrO for gadolinium and/or PdNi would destroy the function of the device due to their differing Curie temperatures, which are intended to serve distinctly different purposes. As such, Garibaldi does not teach, suggest, or make obvious what is suggested by the Examiner because such a structure will not work for its intended purpose.

In addition, as previously presented for the § 102 rejections, Garibaldi does not support a proper § 102 rejection of independent claim 1. As claim 12 is dependent from independent claim 1, the § 103 rejection of dependent claim 12 should be withdrawn.

Based on the forgoing, Appellant respectfully requests reconsideration and withdrawal of the § 103 rejection of claim 12.

Dependent claim 28

Appellant's dependent claim 28 depends indirectly from independent claim 20 and recites that "only preselected portions, less than the entire core, are coated

with the susceptible material." Appellant respectfully traverses the rejection of dependent claim 28 for at least the following reasons.

Appellant submits that Döscher is not applicable prior art. The Döscher application was filed on January 10, 2002, and was published September 7, 2004. The present application was filed February 5, 2002.

The Examiner first cited Döscher as a basis for § 102 and § 103 rejections in the October 19, 2004, Office Action. In the February 22, 2005, response to the Office Action, Appellant submitted that Döscher is not prior art based in part on a declaration under 37 CFR 1.131 that the Appellant conceived of and worked diligently to reduce to practice the inventive subject matter as claimed prior to the effective date of Döscher. The declaration included factual evidence describing the development of the vascular treatment device and vascular treatment system of the present application (Exhibit A). In addition, the declaration included additional evidence of due diligence with respect to the invention claimed in the present application (Exhibit B).

In the subsequent May 16, 2005, Office Action, the Examiner replaced Döscher with the Garibaldi reference as a basis for § 102 and § 103 rejections of the claims of the present application. Hence, after Appellant's swearing behind the reference, the Examiner appeared to concede by removing Döscher from consideration that the Döscher reference is not applicable prior art. As such, Appellant respectfully submits that reintroducing Döscher is inappropriate after the Appeal Brief was filed.

Nonetheless, Appellant respectfully submits that the elements and limitations of the claims of the present application, as recited herein, are patentably distinguishable from the teachings of the cited Garibaldi and Döscher references for at least the following reasons.

Appellant submits that one skilled in the art would not have been motivated to provide the magnetically susceptible material on less than the entire core as this would go against Garibaldi's cited purpose of holding the "patch 120" against a vessel wall with a transverse gradient field (col. 8, lines 53-55). Appellant respectfully submits that one skilled in the art would want to maximize this holding

force by providing as much of the magnetic material as possible. That is, Appellant submits that Garibaldi would not seek to diminish the magnetic force by having the susceptible material included in the "patch 120" in "only preselected portions, less than the entire core", as recited in Appellant's dependent claim 28. Accordingly, coating less than the entire core would run contrary to the understanding of one of ordinary skill in the art.

There are three possible sources for a motivation to combine references: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art. As just presented, the teachings of Garibaldi would not appear to suggest diminishing the amount of magnetic material used on the "patch 120." Additionally, the nature of the problem addressed in Garibaldi does not appear to warrant a reduction in the amount of magnetic material for the reasons presented herein. Moreover, Garibaldi does not appear to provide an insight into the knowledge that one of ordinary skill in the art would have that would motivate and/or provide the desire to go contrary to the stated goal of applying the "patches 120" to the vessel wall with a magnetic force by reducing the amount of the magnetic material used.

In addition, as discussed above for the § 102 rejections, Garibaldi does not support a proper § 102 rejection of independent claim 20. Appellant respectfully submits that, even if Döscher were usable as prior art, which Appellant does not admit, Döscher does not cure the deficiencies of the Garibaldi reference. As claim 28 is dependent from independent claim 20, the § 103 rejection of dependent claim 28 should be withdrawn.

Based on the forgoing, Appellant respectfully requests reconsideration and withdrawal of the § 103 rejection of dependent claim 28.

Dependent claims 42, 44-46, and 48-49

The Examiner asserted in the Corrected Examiner's Answer on pages 5 and 7 that dependent claims 42, 44-46, and 48-49 recite methods of coating and "will be given patentability in method claims" and/or do not include allowable subject

matter. Appellant respectfully traverses the assertion that the claims refer to a manner of making a layer/coating.

Contrary to the Examiner's assertion, dependent claims 42, 44-46, and 48-49 recite a structure for the coating. For example, dependent claims 42 and 46 recite that the coating includes "a polymer binder for the magnetically susceptible material," (in contrast to "binding the coating . . ."). Dependent claims 44 and 48 recite that the coating includes "a sintered coating," (in contrast to reciting "sintering the coating . . .). Similarly, claims 45 and 49 recite that the coating includes "a painted coating," (in contrast to reciting "painting the coating . . .). Appellant respectfully submits that Garibaldi does not provide a teaching or suggestion of a polymer binder, a sintered coating, or a painted coating, as recited in claims 42, 44-46, and 48-49. As such Garibaldi does not appear to teach, suggest, or make obvious each and every element and limitation recited in claims 42, 44-46, and 48-49.

In addition, as previously presented for the § 102 rejections, Garibaldi does not support a proper § 102 rejection of independent claims 1 and 20. As claims 42, 44, and 45 depend from independent claim 1, and claims 46, 48, and 49 depend from independent claim 20, the § 103 rejection of dependent claims 42, 44-46, and 48-49 should be withdrawn.

Based on the forgoing, Appellant respectfully requests reconsideration and withdrawal of the § 103 rejections of dependent claims 42, 44-46, and 48-49.

The Examiner is invited to telephone Appellant's attorney, Joseph C. Huebsch, at (612) 236-0122 with regard to this matter.

CERTIFICATE UNDER 37 C.F.R. §1.8: The undersigned hereby certifies that this correspondence is being transmitted to the United States Patent Office facsimile number (571) 273-8300 on

October 30, 2008

Jillian K. Ross
Name

Signature

Respectfully Submitted,
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Oct. 30, 2008
Date:

VIII. CLAIMS APPENDIX

The Claims on Appeal

1. (Previously Presented) A vascular treatment device, comprising:

a stent formed with a magnetically susceptible material having a magnetic susceptibility that decreases within a preselected temperature range.

2. (Original) The vascular treatment device of claim 1, wherein the susceptible material has a Curie temperature in the preselected temperature range.

3. (Canceled)

4. (Previously Presented) The vascular treatment device of claim 1, wherein the stent includes a core, where the susceptible material comprises a coating on a surface of the core.

5. (Original) The vascular treatment device of claim 4, wherein the coating is disposed on an external surface of the core.

6. (Original) The vascular treatment device of claim 4, wherein the coating is disposed on an internal surface of the core.

7. (Original) The vascular treatment device of claim 4, wherein the coating is disposed on both an internal and external surface of the core.

8. (Previously Presented) The vascular treatment device of claim 1, wherein the stent includes a core, where the core is formed of the susceptible material.

9.-10. (Withdrawn)

11. (Original) The vascular treatment device of claim 4, wherein the core comprises a magnetically susceptible material.

12. (Original) The vascular treatment device of claim 1, wherein the susceptible material comprises one of Ferrite Oxide (FEO) and Chromium Oxide (CrO).

13.-19. (Withdrawn)

20. (Original) A vascular treatment system, comprising:

an electromagnetic field generator; and

a medical device deliverable to a treatment site and including a magnetically susceptible material being magnetically susceptible to an electromagnetic field generated by the generator and having a Curie temperature in a preselected temperature range, such that the implantable device heats to a temperature sufficient to treat the treatment site when the electromagnetic field is applied.

21. (Original) The vascular treatment system of claim 20, wherein the medical device comprises;

a stent having a core material.

22. (Original) The vascular treatment system of claim 21, wherein the susceptible material comprises a coating on a surface of the core material.

23. (Original) The vascular treatment system of claim 22, wherein the coating is disposed on an external surface of the core material.

24. (Original) The vascular treatment system of claim 22, wherein the coating is disposed on an internal surface of the core material.

25. (Original) The vascular treatment system of claim 22, wherein the coating is disposed on both an internal and external surface of the core material.

26. (Original) The vascular treatment system of claim 21, wherein the core material is formed of the susceptible material.

27. (Withdrawn)

28. (Original) The vascular treatment system of claim 22, wherein only preselected portions, less than the entire core, are coated with the susceptible material.

29. (Original) The vascular treatment system of claim 22, wherein the core material comprises a magnetically susceptible material.

30.-33. (Withdrawn)

34. - 41. (Canceled)

42. (Previously Presented) The vascular treatment device of claim 1, wherein the coating includes a polymer binder for the magnetically susceptible material.

43. (Previously Presented) The vascular treatment device of claim 1, wherein the core is a metal selected from the group stainless steel, Nitinol, and tantalum.

44. (Previously Presented) The vascular treatment device of claim 1, wherein the coating includes a sintered coating of the magnetically susceptible material on the core.

45. (Previously Presented) The vascular treatment device of claim 1, wherein the coating includes a painted coating of the magnetically susceptible material on the core.

46. (Previously Presented) The vascular treatment device of claim 20, wherein the coating includes a polymer binder for the magnetically susceptible material.

47. (Previously Presented) The vascular treatment device of claim 20, wherein the core is a metal selected from the group stainless steel, Nitinol, and tantalum.

48. (Previously Presented) The vascular treatment device of claim 20, wherein the coating includes a sintered coating of the magnetically susceptible material on the core.

49. (Previously Presented) The vascular treatment device of claim 20, wherein the coating includes a painted coating of the magnetically susceptible material on the core.

IX. EVIDENCE APPENDIX

No evidence is submitted.

X. RELATED PROCEEDINGS APPENDIX

As there are no appeals or interferences known to Appellant's Representatives which will directly affect, be directly affected by, or have a bearing on the Board's decision in the pending appeal. There are no copies of decisions rendered by a court or the Board to submit.